

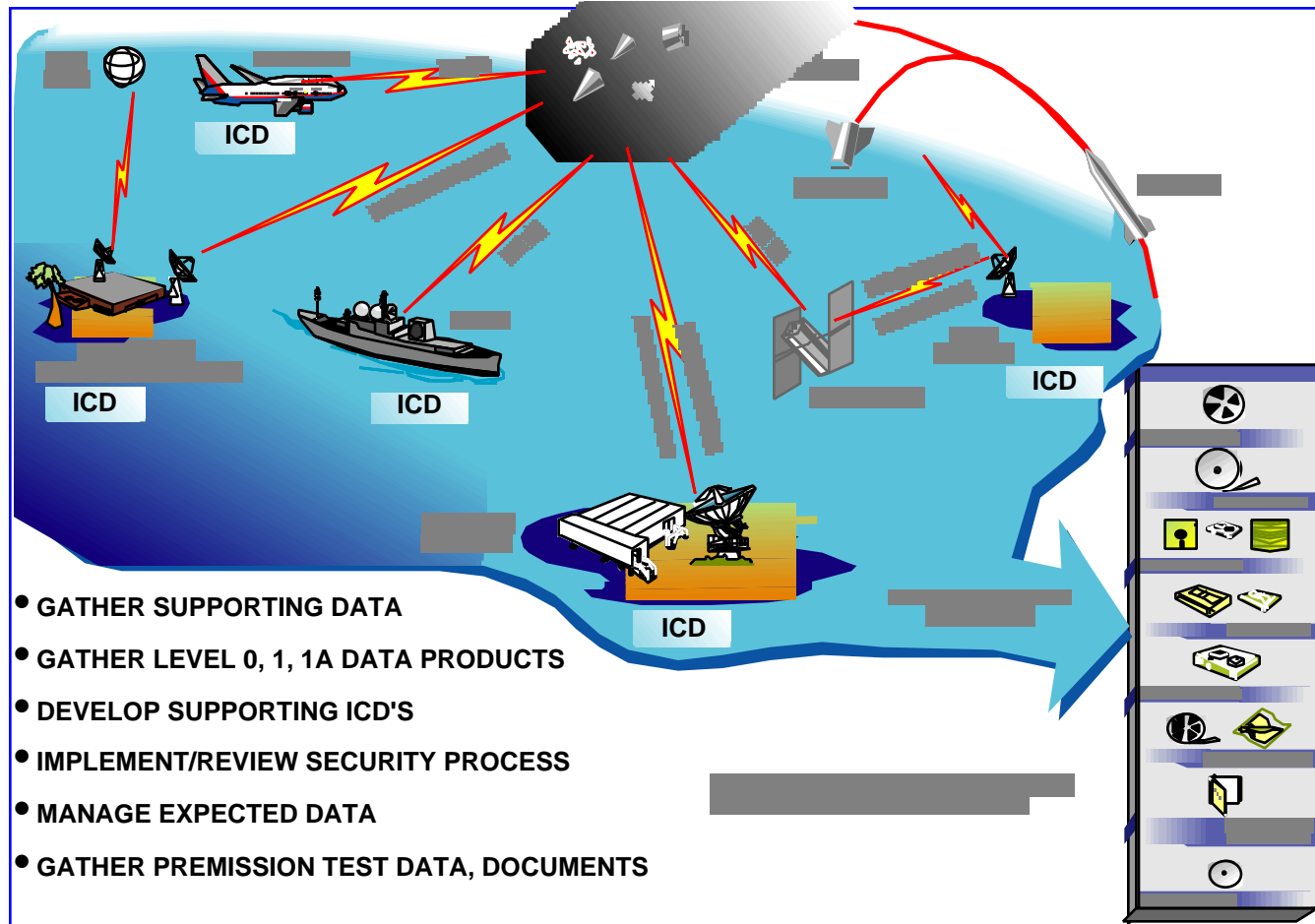
RELATING THE  
BMDO MISSILE  
DEFENSE DATA  
CENTER  
TO THE  
REFERENCE MODEL

**John B Rainey**

# UNCLASSIFIED EXPERIMENT DATA COLLECTION (U)

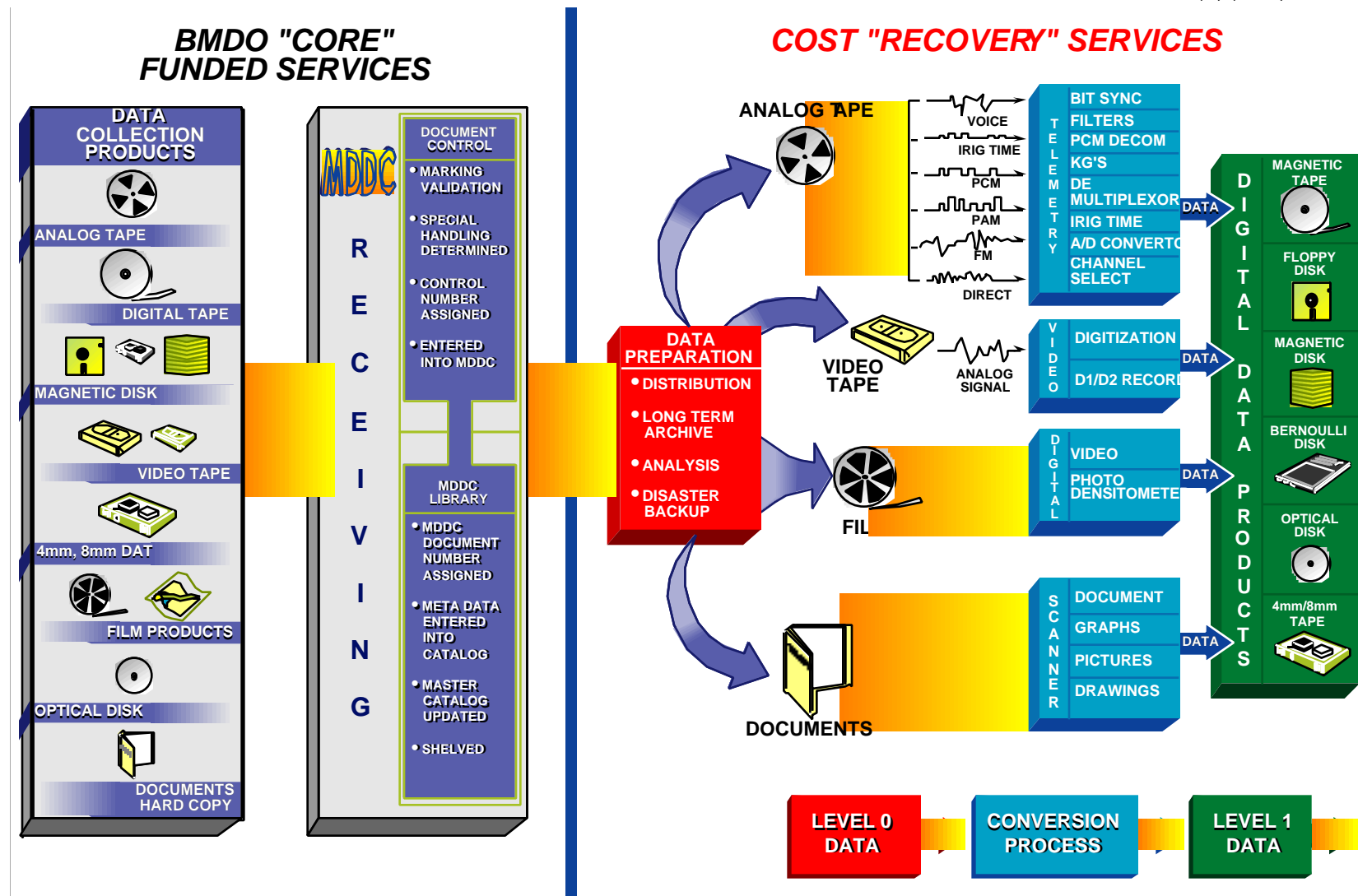


M-940615-19U (C) (4166)



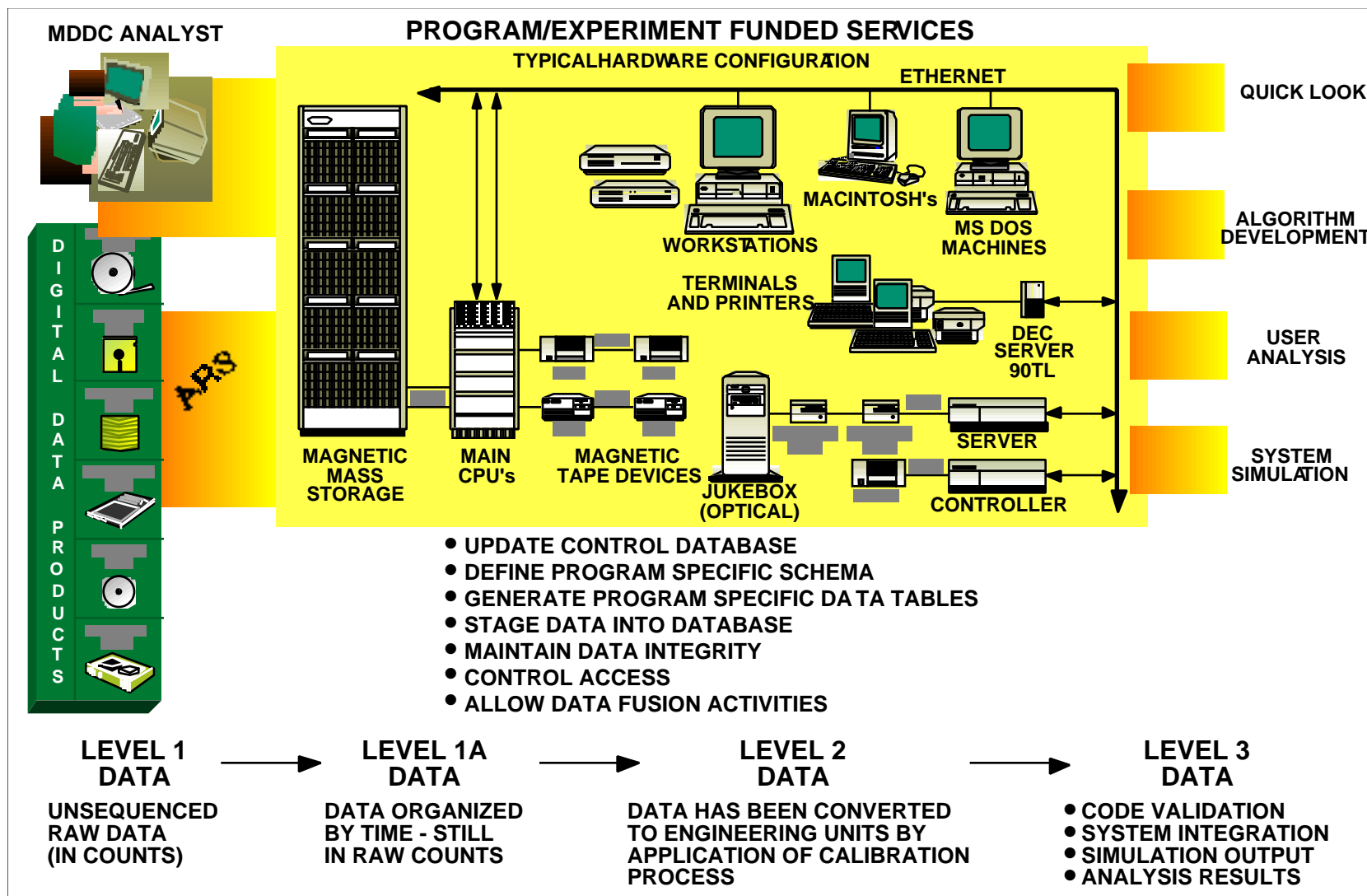
# DATA INGESTION CATALOG AND CONVERSION (U)

M-940317-17U (C) (4160)



# DATA INGESTION ORGANIZE AND DISTRIBUTE (U)

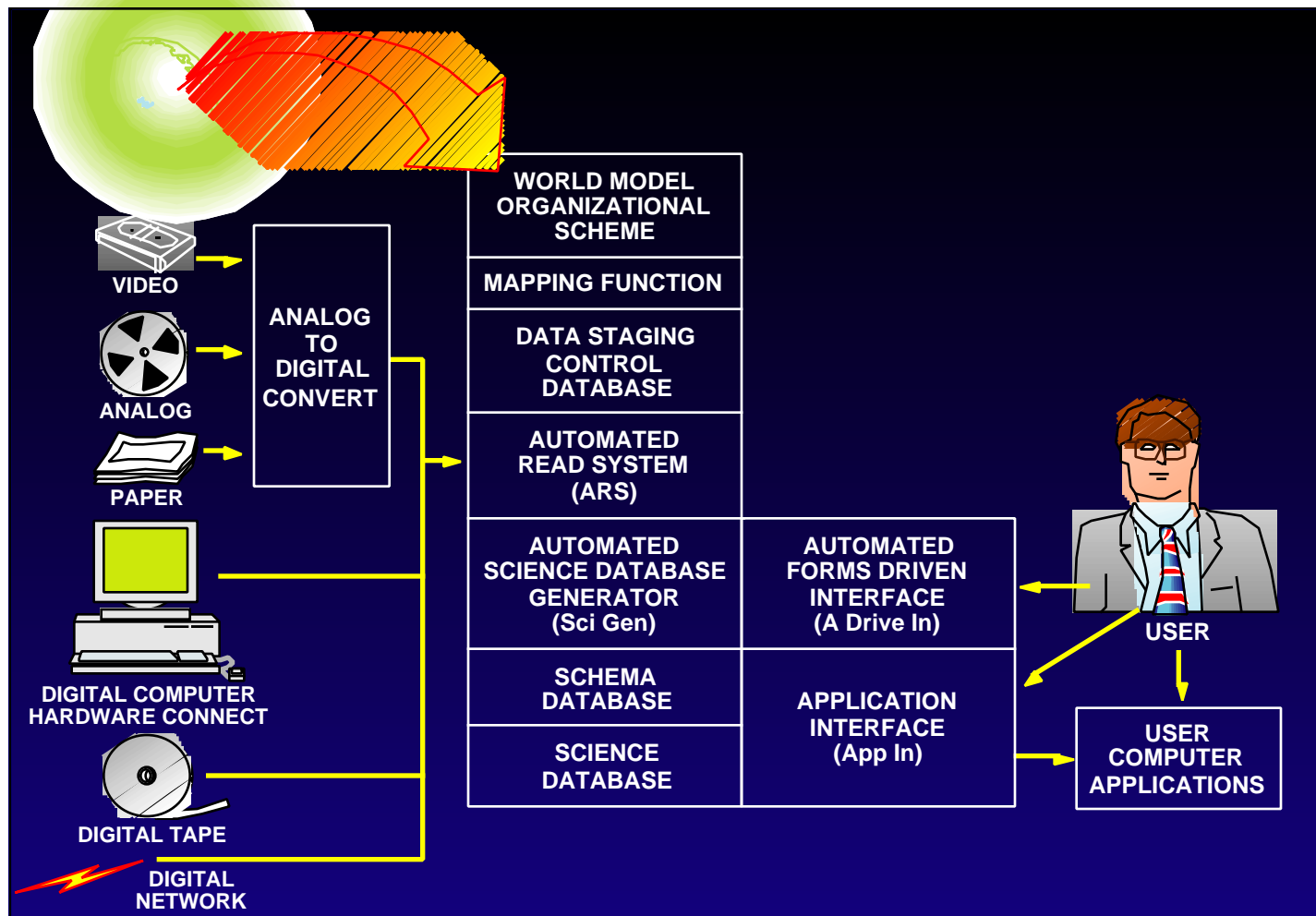
M-940609-01U (C) (4160)



UNCLASSIFIED

# DIGITAL AUTOMATED DATA SYSTEM (DADS) (U)

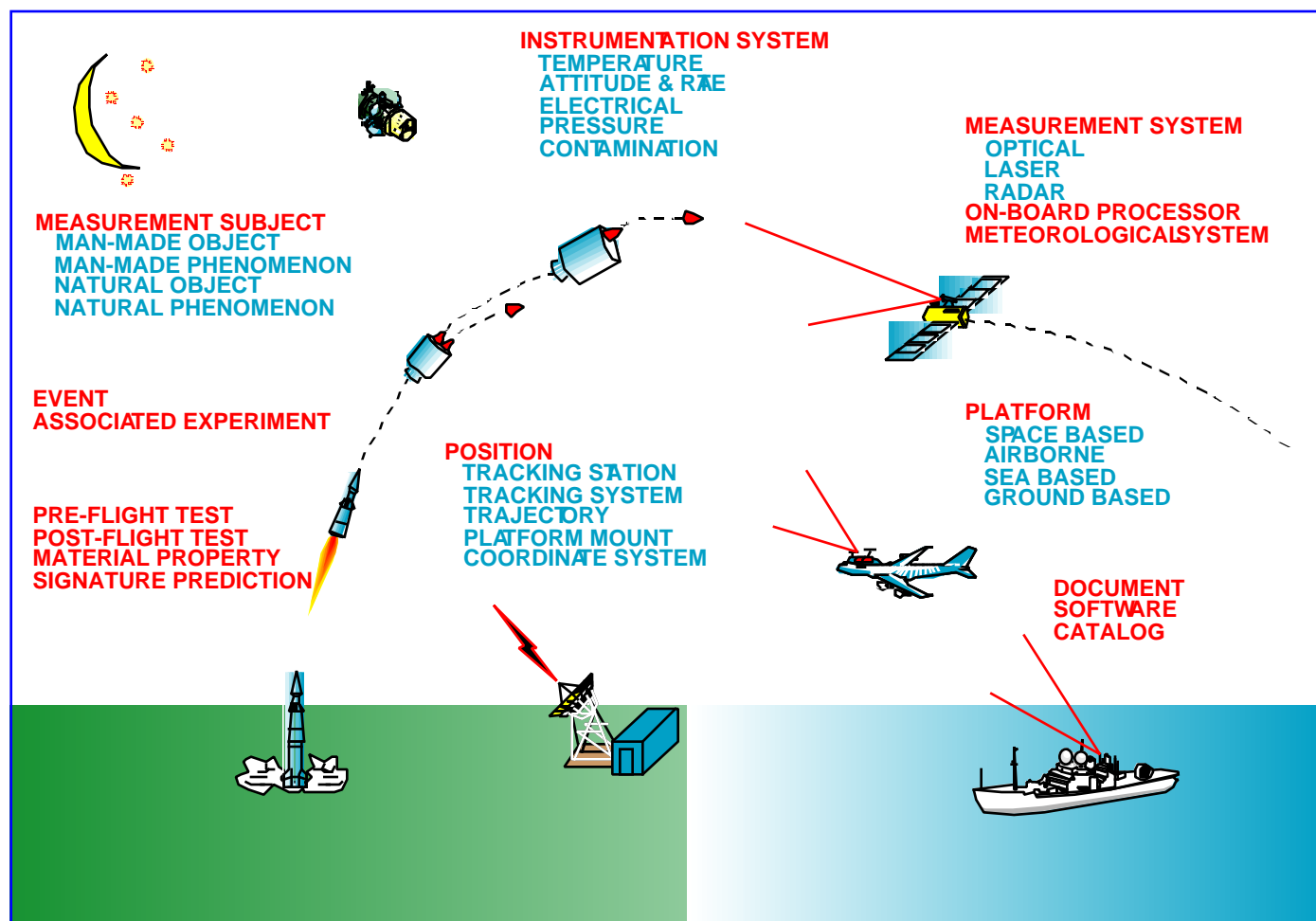
M-930824-02U-A (C) (5048)





# UNCLASSIFIED COMPONENT CLASSIFICATION SCHEME (U)

M-911126-29U (C) (3138)



UNCLASSIFIED

UNCLASSIFIED

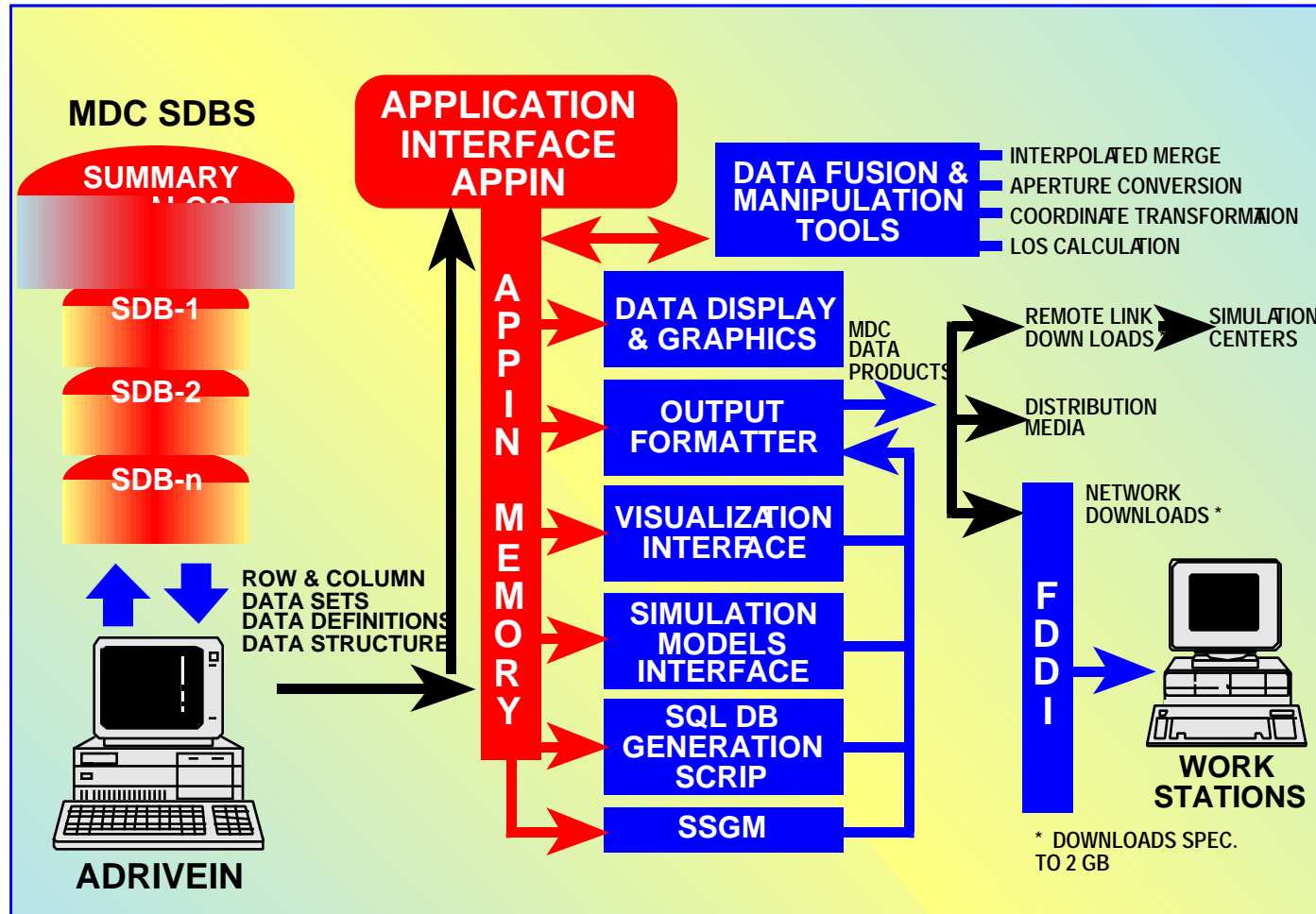
UNCLASSIFIED

# DADS OUTPUT INTERFACE (U)



DATA MANAGEMENT

M-930811-02U (C) (3222)



# **1.0 INGESTION INTERFACE**

**Develop ICD's or MOA's**

**Defines the Mission Statement**

**Data Model Components : Definitions**

**Media: Type & Source**

**File:Type, Relative Location, & Structure**

**Element: Type,Definition, Units,Structure,Relative Location**

**Manage Expected Data**

**Develop Expected Products List**

**Source: Organization, Contact, Phone, Component Name**

**Implement / Review Security Process**

**Security Classification Guide**



# INGESTION

## **Build Generalized Data Model**

**Define & Organize Generalized Component Categories**

**Map Data & Component Categories to Real World**

**Define the Indexes of the Data within Component Category**

## **Generate Program Specific Database**

**Generate Program Specific Schema**

**Generate Program Specific Data Tables**

**DADS's Subsystem SciGen**

## **Define Access Controls**

**Define Agency & Contact that Grants Access**

**Build Pointers to Program Security Guides**

## **Load Data Staging & Control Database (DSCDB)**

**Load Media, Record & Element's Structure & Definitions**

# INGESTION

## **Build Generalized Data Model**

- Define & Organize Generalized Component Categories**

- Map Data & Component Categories to Real World**

- Define the Indexes of the Data within Component Category**

## **Generate Program Specific Database**

- Generate Program Specific Schema**

- Generate Program Specific Data Tables**

- DADS's Subsystem SciGen**

## **Define Access Controles**

- Define Agency & Contact that Grants Access**

- Generate User Access List**

- Build Pointers to Program Security Guides**

## **Load Data Staging & Control Database (DSCDB)**

- Load Media, Record & Element's Structure & Definitions**

# INGESTION

**Receive & Log Data Products**

**Assign Unique Control Number**

**Generate & Relate Keywords / Abstracts**

**Stage Data into Database & Data Verification**

**DADS's Subsystem ARS & Media Analyzer**

**Unpack Data Element & Stage to disk files**

**Copy Stages files to Database on Optical Disk**

**Copy Image & Array Files to Optical Disk**

**Index & Optimize Database Tables**

**Calculate & Test Verification Checksums**

**Row & Column Sums for Images**

**Histograms for Images**

**Sums for Blocks of Scalar Data**

**Sums for Single Dimension Arrays**

**Create Disaster Backup**

**Copy to Optical Disk**

# **METADATA MANAGEMENT**

## **Library Catalog**

**Inventory List of all Items (Documents & Media)**

**Cross Reference of all Items to Programs**

**List of all User Request with Status (Dissemination)**

## **Upper Level Catalog**

**List of all Programs**

**Generalized Categories of all Model Components**

**Categories Mapped to Archived Data**

**Schema Database of each Program Database**

**Tables : Referenced to Program, & all Data Elements**

**Elements : Data Type, Definition, Units, & Index Key**

**Specific Components Referenced to Generalized Categories**

**Tables Referenced to Specific Components**

# **DATA STORAGE**

**Original Media & Documents Stored on Shelves**

**Document Management System**

**Imaged Documents Stored on Optical Disk**

**Document Indexes Stored on Optical Disk**

**Project Databases Stored on Optical Disk**

**Database Tables**

**Scalar Data Referenced to Time**

**Images Stored in Common Image File**

**Array Data Stored in Common Array File Structure**

**All Images & Arrays Referenced by Sample Time in Seconds**

# **ACCESS**

**DADS's Subsystem ADriveIn**

**User Scrolls the Upper Level Catalog**

**User Scrolls the Program's Schema Database**

**Component Definitions**

**Data Element Definitions & Units**

**Point & Click Selection**

**Menu Driven**

**User Defines the Query Limits**

**System Builds SQL Statement**

**Query Results Passed to Application Interface**

**Application Interface**

**Passes Results to User's on-line Application**

**Passes Results to System's Display Application**

**Writes Results to Output Formatter**